

Initial Notification Form  
[40 CFR 63.9(b)(2)]<sup>1</sup>

**Applicable Rule:** 40 CFR part 63, subpart ZZZZ – National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE MACT)

**Please read the rule for details on requirements and deadlines.** Notification requirements are found in §63.6645 of subpart ZZZZ and §63.9 of the General Provisions as noted.

*Please note that you are not required to use this form and may submit the required information in a letter. However, all required information must be submitted by the following initial notification deadlines:*

- **December 13, 2004** for sources whose startup occurs before August 16, 2004; OR
- **Not later than 120 days after startup**, if startup occurs on or after August 16, 2004.

Please print or type the following information for each source subject to the RICE MACT.

**1. Name and Address of Facility Owner [40 CFR §63.9(b)(2)(i) and (ii)]**

Name of Facility: \_\_\_\_\_

Name of Owner/Operator: \_\_\_\_\_

Mailing Address: \_\_\_\_\_

City: \_\_\_\_\_ County: \_\_\_\_\_ State: \_\_\_\_\_ Zip Code: \_\_\_\_\_

Physical Location (if different from mailing address)

Street Address: \_\_\_\_\_

City: \_\_\_\_\_ County: \_\_\_\_\_ State: \_\_\_\_\_ Zip Code: \_\_\_\_\_

Contact Person: \_\_\_\_\_ Phone Number: \_\_\_\_\_

Email: \_\_\_\_\_

**2. Is the facility a Major Source [40 CFR §63.9(b)(2)(v)]?** ☐ Yes ☐ No\*

\*(The facility is considered an area source and does not need to submit this form)

**2a. Do you intend to accept enforceable permit limits to reduce emissions of hazardous air pollutants (HAP) to less than major source levels prior to the MACT compliance date(s) for engines at this facility?** ☐ Yes\* ☐ No

\*If yes, please attach a description of the action(s) planned to achieve non-major status. NOTE: The description of action(s) planned to achieve non-major status is provided for information only and is not binding. If you take federally enforceable permit limits, prior to the subpart ZZZZ compliance date, to reduce total HAP emissions from your facility such that you are not longer a major source (as defined in 40 CFR §63.2), engines located at your facility will not be subject to the subpart (refer to the instructions).

<sup>1</sup> This form should be completed and submitted for new engines with a site rating greater than 500 horsepower (hp) that are located at major sources of HAP emissions. You are also required to submit this form for existing spark ignition 4-stroke rich burn engines with a site rating greater than 500 HP that are located at major sources of HAP emissions.

**3. Relevant standard and compliance date [40 CFR §63.9(b)(2)(iii)]**

This facility operates RICE that are subject to 40 CFR part 63, subpart ZZZZ (check one):

☐ Yes    ☐ No

Subpart ZZZZ requires you to submit an initial notification for new engines with a site rating greater than 500 horsepower (hp) that are located at major sources of HAP emissions. You are also required to submit an initial notification for existing spark ignition 4-stroke rich burn engines with a site rating greater than 500 HP that are located at major sources of HAP emissions. Therefore, it is not necessary to list all engines located at a given facility. Complete the following table for each engine for which initial notification is required under 40 CFR part 63, subpart ZZZZ (attach additional copies of this page as needed).

Engine ID	Engine Description		Site-Rated Horsepower (hp)	Existing/New/Reconstructed <sup>a</sup>	Subpart ZZZZ Subcategory <sup>b</sup>	Subpart ZZZZ Compliance Date	Initial Notification Only? <sup>c</sup>
	Manufacturer	Model					
							<input type="checkbox"/> Yes <input type="checkbox"/> No
							<input type="checkbox"/> Yes <input type="checkbox"/> No
							<input type="checkbox"/> Yes <input type="checkbox"/> No
							<input type="checkbox"/> Yes <input type="checkbox"/> No
							<input type="checkbox"/> Yes <input type="checkbox"/> No
							<input type="checkbox"/> Yes <input type="checkbox"/> No
							<input type="checkbox"/> Yes <input type="checkbox"/> No
							<input type="checkbox"/> Yes <input type="checkbox"/> No
							<input type="checkbox"/> Yes <input type="checkbox"/> No
							<input type="checkbox"/> Yes <input type="checkbox"/> No
							<input type="checkbox"/> Yes <input type="checkbox"/> No
							<input type="checkbox"/> Yes <input type="checkbox"/> No

<sup>a</sup> Refer to the definition for existing, new, and reconstructed included in the instructions for this form.

<sup>b</sup> Use the subcategories included in the instructions for this form.

<sup>c</sup> If yes, attach rationale to explain why each engine had no additional requirements under subpart ZZZZ (e.g., engine operates as an emergency stationary RICE).

4. For the stationary RICE listed in question 3, provide a list of the HAP emitted [40 CFR §63.9(b)(2)(iv)].

1. _____	7. _____
2. _____	8. _____
3. _____	9. _____
4. _____	10. _____
5. _____	11. _____
6. _____	12. _____

5. Signature

I certify that the information contained in this form to be accurate and true to the best of my knowledge.

Authorized Signature \_\_\_\_\_

Typed or Printed Name of Signatory \_\_\_\_\_

Title of Signatory \_\_\_\_\_ Date \_\_\_\_\_

Please mail this completed form to both your State Air Pollution Control Office  
and your EPA Regional Office

## Instructions

### Question 1. Facility Information [40 CFR §63.9(b)(2)(i)and (ii)]

This question is self-explanatory –include the name and address, including physical location, if different, of the facility.

### Question 2. Is The Facility a Major Source? [40 CFR §63.9(b)(2)(v)]

You are a major source if your plant site emits or has the potential to emit 10 tons per year (tpy) of one HAP or 25 tpy of any combination of HAP [§63.6585(b)]. Most RICE or groups of RICE are not major HAP emissions sources by themselves but are located at major HAP sites. Note that a facility is considered “major” for HAP emissions, regardless of the contribution from the RICE alone. Further, you must include all RICE at your facility in this calculation, not just RICE with site-rated horsepower greater than 500.

When calculating the potential to emit, include all HAP emission sources located within the contiguous area and under common control, not just RICE. However, the RICE MACT has special considerations for determining major source status of oil and gas production and natural gas transmission and storage facilities [§63.6585(b)].

1. Do not add together emissions from any oil or gas exploration or production well (with its associated equipment<sup>1</sup>) and emissions from any pipeline compressor station or pump station with emissions from other similar units, even when emission points are in a contiguous area or under common control.
2. For oil and gas production facilities, do not add together emissions from processes, operations, or equipment that are not part of the same oil and gas production facility.<sup>2</sup>
3. For production field facilities, only HAP emissions from glycol dehydration units, storage vessel with the potential for flash emissions, combustion turbines and RICE need to be added together.
4. Do not add together emissions from processes, operations, and equipment that are not part of the same natural gas transmission and storage facility.<sup>3</sup>

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<sup>1</sup> “Associated equipment” is equipment associated with an oil or natural gas exploration or production well, and includes all equipment from the well bore to the point of custody transfer, except glycol dehydration units, storage vessels with potential for flash emissions, combustion turbines, and stationary RICE.

<sup>2</sup> “Oil and gas production facility” means any grouping of equipment where hydrocarbon liquids are processed, upgraded (i.e., remove impurities or other constituents to meet contract specifications), or stored prior to the point of custody transfer; or where natural gas is processed, upgraded, or stored prior to entering the natural gas transmission and storage source category. For purposes of a major source determination, “facility” (including a building, structure, or installation) means oil and natural gas production and processing equipment that is located within the boundaries of an individual surface site as defined in this section. Equipment that is part of a facility will typically be located within close proximity to other equipment located at the same facility. Pieces of production equipment or groupings of equipment located on different oil and gas leases, mineral fee tracts, lease tracts, subsurface or surface unit areas, surface fee tracts, surface lease tracts, or separate surface sites, whether or not connected by a road, waterway, power line or pipeline, shall not be considered part of the same facility. Examples of facilities in the oil and natural gas production source category include, but are not limited to, well sites, satellite tank batteries, central tank batteries, a compressor station that transports natural gas to a natural gas processing plant, and natural gas processing plants.

<sup>3</sup> “Natural gas transmission and storage facility” means any grouping of equipment where natural gas is processed, compressed, or stored prior to entering a pipeline to a local distribution company or (if there is no local distribution company) to a final end user. Examples of a facility for this source category are: an underground natural gas storage operation; or a

To determine the potential to emit, follow these steps:

1. Identify all sources of emissions considering the oil and natural gas provisions listed above, if applicable.
2. Identify all HAP that your plant site emits.
3. Select a method to use to determine your HAP emissions.
4. For each HAP, determine the maximum amount that each production process or piece of equipment in your plant site can emit in one year. Use one of the following:
  - a. Your RICE (or other process) operates 24 hours per day, 7 days per week, 365 days per year without control.
  - b. If you have federally enforceable<sup>4</sup> restrictions that affect emissions (for example, hours of operations, the presence of a control device, or the type of fuel used) you may include the effect that these restrictions have on emissions in your potential-to-emit calculations.
  - c. *Oil and natural gas production facilities* [§63.6675]: Potential-to-emit is calculated using the maximum natural gas or hydrocarbon liquid throughput for an oil and natural gas production facility. You may choose from one of the following methods to determine your maximum natural gas or hydrocarbon liquid [§63.760(a)]:
    - i. If you can show a decline in annual natural gas or hydrocarbon liquid throughput (whichever is appropriate) for the five years prior to June 17, 1999, your maximum annual natural gas or hydrocarbon liquid throughput is the average annual natural gas or hydrocarbon liquid throughput for the three years prior to June 17, 1999 times 1.2.<sup>5</sup>
    - ii. If you cannot show a decline in annual natural gas or hydrocarbon liquid throughput (whichever is appropriate) for the five years prior to June 17, 1999, your maximum annual natural gas or hydrocarbon liquid throughput is the highest annual natural gas or hydrocarbon liquid throughput over the five years prior to June 17, 1999 times 1.2.<sup>6</sup>
    - iii. You may use your facility's design maximum natural gas or hydrocarbon liquid throughput to estimate potential-to-emit for your facility.

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natural gas compressor station that receives natural gas via pipeline, from an underground natural gas storage operation, or from a natural gas processing plant. The emission points associated with these phases include, but are not limited to, process vents. Processes that may have vents include, but are not limited to, dehydration and compressor station engines. For the purpose of a major source determination, facility means natural gas transmission and storage equipment that is located inside the boundaries of an individual surface site and is connected by ancillary equipment, such as gas flow lines or power lines. Equipment that is part of a facility will typically be located within close proximity to other equipment located at the same facility. Natural gas transmission and storage equipment or groupings of equipment located on different gas leases, mineral fee tracts, lease tracts, subsurface unit areas, surface fee tracts, or surface lease tracts shall not be considered part of the same facility.

<sup>4</sup> The following are considered federally enforceable limits and/or operating conditions: limits set as a part of a MACT standard; limits set as a part of an NSPS; title V permit limits; limits set as part of an approved State Implementation Plan (SIP) or Federal Implementation Plan (FIP); limits set as part of a construction permit under 40 CFR part 51; certain operating permits; limits set under a State rule that has been approved by EPA to implement and enforce MACT; and consent agreements.

<sup>5</sup> If the annual natural gas or hydrocarbon liquid throughput increases above the maximum throughput calculated under this option, you must recalculate your maximum throughput using the higher throughput times 1.2.

<sup>6</sup> If the annual natural gas or hydrocarbon liquid throughput increases above the maximum throughput calculated under this option, you must recalculate your maximum throughput using the higher throughput times 1.2.

- iv. You must determine the maximum values for other parameters used to estimate potential-to-emit as the maximum for the same period of time you determined your maximum natural gas or hydrocarbon liquid throughput above. You must base these parameters on an annual average or the highest single measured value.
- d. *Natural gas transmission and storage facilities* [§63.6675]. Potential-to-emit is calculated using the maximum natural gas throughput for a natural gas transmission and storage facility. You may choose from one of the following methods to determine your maximum natural gas throughput [§63.1270(a)(1) and (2)]:

- i. If your facility stores natural gas, you may choose to calculate maximum annual natural gas throughput using the following equation:<sup>7</sup>

$$\text{Throughput} = \frac{8,760}{\left( \frac{1}{IR_{\max}} + \frac{1}{WR_{\max}} \right)}$$

Where:

Throughput = Maximum annual facilitywide natural gas throughput in cubic meters per year.

$IR_{\max}$  = Maximum facility injection rate in cubic meters per hour.

$WR_{\max}$  = Maximum facility withdrawal rate in cubic meters per hour.

8,760 = Maximum hours of operation per year.

- ii. If your facility only transports natural gas, you may calculate maximum annual natural gas throughput as the highest annual natural gas throughput over the five years prior to June 17, 1999 times 1.2.<sup>8</sup>
  - iii. You may use your facility's design maximum natural gas throughput to estimate potential-to-emit for your facility.
  - iv. You must determine the maximum values for other parameters used to estimate potential-to-emit as the maximum for the same period of time you determined your maximum natural gas throughput above. You must base these parameters on an annual average or the highest single measured value.
5. Add the maximum emissions from all production processes and equipment.

Since Subpart ZZZZ only applies to major sources, true minors or area sources do not need to complete and submit this form. Similarly, if you have obtained a synthetic minor permit, you would be a minor source not subject to this NESHAP. However, if you are in the process of obtaining a synthetic minor permit, please include the relevant information at Question 2a.

## Question 2a. Synthetic Minor Sources

EPA policy provides owners/operators with the opportunity to avoid a standard through a limit on its potential to emit, if federally enforceable permit limits are in place (i.e., approved by the delegated

<sup>7</sup> If the annual natural gas throughput increases above the maximum throughput calculated under this option, you must recalculate your maximum throughput using the higher throughput times 1.2.

<sup>8</sup> If the annual natural gas throughput increases above the maximum throughput calculated under this option, you must recalculate your maximum throughput using the higher throughput times 1.2.

authority) prior to the compliance date of the standard.<sup>9</sup> This question is intended to notify the delegated authority that a major source facility is seeking federally enforceable permit limits to avoid subpart ZZZZ by becoming a “synthetic minor source” (i.e., potential to emit is less than 10 tpy of any one HAP or 25 tpy of total HAP). Owners/operators of facilities with existing 4SRB engines may reduce total potential emissions at the facility and qualify as a “synthetic minor source” at any time before June 15, 2007, so that the existing 4SRB engines will not be subject to subpart ZZZZ. Owners/operators of facilities with new or reconstructed engines may reduce total potential emissions at the facility and qualify as a “synthetic minor source” up until August 16, 2004 or the startup date of the new or reconstructed engines, whichever is later, so that the new or reconstructed engines will not be subject to subpart ZZZZ.

### **Question 3. Identification of Relevant Source Categories (40 CFR §63.9(b)(2)(iii))**

Complete the table for each stationary RICE required to submit an initial notification. The following definitions are provided to assist with in completing question 3.

#### Existing/New/Reconstructed

You are considered an **existing stationary RICE** if you commenced construction before December 19, 2002.

You are considered a **new or reconstructed stationary RICE** if you commenced construction or reconstruction on or after December 19, 2002.

You are considered a **reconstructed stationary RICE** if modifications meet the definition or reconstruction as follows:

Reconstruction, unless otherwise defined in a relevant standard, means the replacement of components of an affected or a previously nonaffected source to such an extent that:

- (1) The fixed capital cost of the new components exceeds 50 percent of the fixed capital cost that would be required to construct a comparable new source; and
- (2) It is technologically and economically feasible for the reconstructed source to meet the relevant standard(s) established by the Administrator (or a State) pursuant to section 112 of the Act. Upon reconstruction, an affected source, or a stationary source that becomes an affected source, is subject to relevant standards for new sources, including compliance dates, irrespective of any change in emissions of hazardous air pollutants from that source.

#### Subcategories [§63.6675]

Choose one of the following engine subcategories:

1. **Emergency Stationary RICE:** An emergency stationary RICE is any stationary RICE that operates in an emergency situation. Emergency situations include the production of power for critical networks or equipment when electric power from the local utility is interrupted, as well as pumping water in the case of fire or flood [§63.6675]. Stationary RICE that operate in an

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<sup>9</sup> Memorandum from Seitz, J.S., U.S. Environmental Protection Agency, Office of Air Quality Planning and Standards, to U.S. Environmental Protection Agency Regional Air Compliance Branch Chiefs. May 16, 1995. Potential to Emit for MACT Standards -- Guidance on Timing Issues.

emergency situation are considered emergency stationary RICE, provided the following criteria are met:

- emergency stationary RICE may be operated to perform maintenance checks and readiness testing, provided these tests are recommended by the manufacturer, vendor or insurance company associated with the engine.
- there is no limit on the use of an emergency stationary RICE in emergency situations and for routine testing and maintenance, but testing should be minimized.
- emergency stationary RICE may be operated in non-emergency situations no more than 50 hours per year.

*You only have to submit an initial notification for new or reconstructed emergency stationary RICE; existing emergency stationary RICE do not have to submit this form and are not subject to any requirements under subpart ZZZZ*

2. **Limited Use Stationary RICE:** A limited use stationary RICE is any stationary RICE that operates less than 100 hours per year.

*You only have to submit an initial notification for new or reconstructed emergency stationary RICE; existing emergency stationary RICE do not have to submit this form and are not subject to requirements under subpart ZZZZ.*

3. **Stationary RICE that combust landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis.** Landfill gas is the gaseous by-product of the land application of municipal refuse typically formed through the anaerobic decomposition of waste materials and is composed primarily of methane and CO<sub>2</sub>. Digester gas is the gaseous by-product of wastewater treatment typically formed through the anaerobic decomposition of organic waste materials and is composed primarily of methane and CO<sub>2</sub>.

*You have to submit an initial notification for new or reconstructed stationary RICE that meet these criteria. You also have monitoring, recordkeeping, and reporting requirements related to your annual fuel usage. Existing stationary RICE do not have to submit this form and are not subject to requirements under subpart ZZZZ.*

4. **Spark ignition 4-stroke rich burn (4SRB) stationary RICE:** A stationary RICE is a spark ignition engine when the compressed air/fuel mixture of the engine is ignited by a timed electric spark generated by a spark plug. The engine is a spark ignition four-stroke stationary RICE if the power cycle is completed in two crankshaft revolutions, with intake and compression strokes in the first revolution and power and exhaust strokes in the second revolution. The engine is a rich burn stationary RICE if it is a 4-stroke engine where the manufacturer's recommended operating air/fuel ratio divided by the stoichiometric air/fuel ratio at full load conditions is less than or equal to 1.1. If the engine was originally manufactured as a rich burn engine, but was modified before December 19, 2002 with passive emission control technology for nitrogen oxides (NO<sub>x</sub>) (such as pre-combustion chambers) it is considered a lean burn engine. Also, if existing engines (engines where construction was commenced before December 19, 2002) have no manufacturer's recommendations for air/fuel ratio, they are considered rich burn engines if the excess oxygen content of the exhaust at full load conditions is less than or equal to 2 percent.



*You have to submit an initial notification for existing, new, or reconstructed stationary RICE that meet these criteria. You also have to meet all MACT requirements under subpart ZZZZ.*

5. **Spark ignition 2-stroke lean burn (2SLB) stationary RICE:** An engine is a spark ignition engine when the compressed air/fuel mixture of the engine is ignited by a timed electric spark generated by a spark plug. A 2-stroke engine is an engine that completes the power cycle in a single crankshaft revolution. All spark ignition 2-stroke engines are considered 2SLB under the subpart ZZZZ.

*You have to submit an initial notification for new or reconstructed stationary RICE that meet these criteria. You also have to meet all MACT requirements under subpart ZZZZ. Existing stationary RICE do not have to submit this form and are not subject to requirements under subpart ZZZZ.*

6. **4-stroke lean burn (4SLB) stationary RICE:** An engine is a spark ignition engine when the compressed air/fuel mixture of the engine is ignited by a timed electric spark generated by a spark plug. The engine is 4-stroke engine if it completes the power cycle in two crankshaft revolutions, with intake and compression strokes in the first revolution and power and exhaust strokes in the second revolution. The engine is a 4SLB stationary RICE if it is a 4-stroke engine and is not a rich burn engine.

*You have to submit an initial notification for new or reconstructed stationary RICE that meet these criteria. You also have to meet all MACT requirements under subpart ZZZZ. Existing stationary RICE do not have to submit this form and are not subject to requirements under subpart ZZZZ.*

7. **Compression ignition (CI) stationary RICE:** The engine is a CI engine if a high boiling point liquid fuel injected into the combustion chamber of the engine ignites when the air charge has been compressed to a temperature sufficiently high for auto-ignition. Compression engines include diesel engines, dual-fuel engines (engines where liquid fuel, usually diesel fuel, is used for compression ignition and a gaseous fuel, usually natural gas, is used as the primary fuel), and engines that are not spark ignition engines.

*You have to submit an initial notification for new or reconstructed stationary RICE that meet these criteria. You also have to meet all MACT requirements under subpart ZZZZ. Existing stationary RICE do not have to submit this form and are not subject to requirements under subpart ZZZZ.*

#### **Question 4. Description of the Major Source, Identification of Emission Points and HAP Emitted (40 CFR §63.9(b)(2)(iv))**

The intent of this question is to give the States an idea of the HAPs emitted under subpart ZZZZ.

Primary HAP emitted from this stationary RICE are typically formaldehyde, acrolein, methanol, and acetaldehyde.

#### **Question 5. Signature**

This section must be signed by an authorized representative of the member company that is responsible for the overall operation of the facility. 40 CFR 70.2 defines a responsible official as the President, Secretary, Treasurer, or Vice President of the company or the affected sources designated representative under title V or part 70 activities.

## **MAILING ADDRESSES**

Please mail the completed form to both your State Air Pollution Control Office and your EPA Regional Office (see addresses provided below):

**EPA Region I** (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont), Air Compliance Clerk, 1 Congress Street, Suite 1100, Boston, MA 02114-2023.

**EPA Region II** (New Jersey, New York, Puerto Rico, Virgin Islands), Air Compliance Branch Chief, 290 Broadway, New York, NY 10007-1866.

**EPA Region III** (Delaware, District of Columbia, Maryland, Pennsylvania, Virginia, West Virginia), Director, Air Protection Division, 1650 Arch Street, Philadelphia, PA 19103-2029.

**EPA Region IV** (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee), Director, Air, Pesticides and Toxics Management Division, Atlanta Federal Center, 61 Forsyth Street, SW, Atlanta, GA 30303-3104.

**EPA Region V** (Illinois, Indiana, Michigan, Minnesota, Ohio, Wisconsin), Director, Air and Radiation Division, 77 West Jackson Blvd., Chicago, IL 60604-3507.

**EPA Region VI** (Arkansas, Louisiana, New Mexico, Oklahoma, Texas), Air Permits Section, Fountain Place 12<sup>th</sup> Floor, Suite 1200, 1445 Ross Avenue, Dallas, TX 75202-2733.

**EPA Region VII** (Iowa, Kansas, Missouri, Nebraska), Director, Air, RCRA and Toxics Division, 901 North 5<sup>th</sup> Street, Kansas City, KS 66101.

**EPA Region VIII** (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming), Air and Toxics, 999 18th Street, Suite 500, Denver, CO 80202-2466.

**EPA Region IX** (Arizona, California, Hawaii, Nevada, American Samoa, Guam), Air Division, 75 Hawthorne Street, San Francisco, CA 94105.

**EPA Region X** (Alaska, Idaho, Oregon, Washington), Director, Office of Air Quality, 1200 Sixth Avenue, Seattle, WA 98101.